

**Finding of No Significant Impact
for
Switzler Creek Watershed Rehabilitation Project Site No. 7
Osage County, Kansas**

Introduction

The Switzler Creek Watershed Rehabilitation Project Site No. 7 (Project) is a federally assisted action authorized for planning under the Authority of the Watershed Protection and Flood Prevention Act, Public Law 83-566 (PL-83-566), as amended by Section 313 of Public Law 106-472, The Small Watershed Rehabilitation Amendments of 2000, and in accordance with Section 102 (2) (c) of the National Environmental Policy Act of 1969, Public Law 91-190, as amended (42 USC 43221 et seq.). These acts authorize the Natural Resources Conservation Service (NRCS) to provide technical and financial assistance to local project sponsors. Sponsoring local organizations (SLO) of the Switzler Creek Project are the Osage County Conservation District and the Switzler Creek Watershed Joint District No. 63.

An environmental assessment was undertaken in conjunction with the development of supplement to the original watershed plan. This assessment was conducted in consultation with local, State, Tribal Governments, and Federal agencies as well as with interested organizations and individuals. Data developed during the assessment is available for public review at the following location:

U.S. Department of Agriculture
Natural Resources Conservation Service
760 South Broadway
Salina, Kansas 67401
www.ks.nrcs.usda.gov

Recommended Action

Site No. 7 is a high hazard class dam. The existing earthfill dam has a principal spillway consisting of a concrete riser and barrel, and an earthen auxiliary spillway. The PL-83-566 purpose for the Project is flood prevention.

The Federal Reconstruction Alternative will modify the dam to meet current state and NRCS safety standards and to maintain flood damage reduction benefits associated with Site No. 7. Works of improvement include raising the top of dam elevation, replacement of the principal spillway, and moving the auxiliary spillway to the left abutment. These works of improvement will extend the life of this structure for an additional 100 years.

Effect of Recommended Action

Through federal rehabilitation, Site No. 7 will be reconstructed to meet NRCS dam safety criteria for high hazard structures. These requirements exceed state dam safety criteria for high hazard structures in Kansas. The design life of the Project is planned for 100 years. Site No. 7 would be designed to control a rainfall event that exceeds a 100-year frequency event.

There would be approximately a 435 acre-foot increase in the floodwater-retarding pool storage, thereby allowing for some additional storage of storm-water runoff and subsequent settling of sediment and nutrients during larger precipitation events. Construction activities would include adding fill to the embankment, replacing the existing principal spillway pipe and inlet, protecting the embankment with fence, relocating the auxiliary spillway to the left abutment, and miscellaneous earthmoving activities. The permanent pool elevation will remain at the original

pool elevation, and the detention pool will continue to collect sediment from storm events. Therefore, this alternative will have an insignificant effect on water quality after construction, both upstream and downstream of the dam.

The dam would continue to provide flood control benefits. The sediment storage capacity for a 100-year design life would be provided. Temporary short-term effects on erosion and sedimentation would result from construction activities. Standard best management practices (BMPs) such as silt fencing and seeding with sod-forming vegetative species on disturbed areas would be implemented to minimize erosion and sediment load transport under a storm-water pollution-prevention plan as more than one acre of land is being disturbed.

The selected alternative provides flood control for events, including 100-year-rain events, by increasing the height of the dam above existing dam height. The existing pipe spillway elevation will remain the same. Due to the increase in floodwater-retarding capacity provided by this alternative, a slight increase to existing flood control benefits would occur. The floodwater-retarding storage (measured to the auxiliary spillway crest) would increase from 1628 ac-ft to 2063 ac-ft of storage. This additional storage will detain a design storm that is greater than the 100-year storm event, and will reduce the frequency of use of the auxiliary spillway. The effect on flood control for this alternative is minimal for all storm events at or below 100-year frequency event. Temporary inundation losses of upstream areas for storms above the 100-year frequency event will be minimal due to the brief inundation duration for areas above the 100-year flood inundation elevation.

There would be no changes to the normal pool of Site No. 7. Increasing the height and extending the toe of the dam will modify the land surface, but this area will remain in native grassland after construction. The auxiliary spillway expansion will result in the conversion of 4.6 acres of upland woodland into native grass and 2.5 acres of riparian woodland. The riparian woodland will be mitigated with 2.6 acres of riparian woodland planting. Additionally, no prime or unique farmland will be converted to non-agricultural use.

The Project is anticipated to beneficially affect transportation systems in or around the Project area as it protects downstream populations from flooding. The Project will increase flood protection to the downstream transportation systems only for storms in excess of the 100-year storm event.

The Kansas State Historic Preservation Office (SHPO) was contacted by the NRCS and the Project area was reviewed by the Kansas State Historical Society. No significant archeological sites were found in the Project area. Review of the online National Register of Historic Places (NRHP) website did not reveal the presence of the site structure on the NRHP. Tribal consultation was completed by the NRCS. If cultural resources are inadvertently discovered during implementation, NRCS will follow procedures as detailed in the State Level Agreement between the SHPO and Kansas NRCS.

A floodplain permit will be necessary. It is anticipated that the Project will not result in an adverse effect or incompatible development within the base floodplain. It will increase flood protection to downstream properties by raising the auxiliary spillway to meet federal criteria.

Due to increase in width of the structure and extension of the toe of the embankment, there would be a loss of 37 feet of stream channel that averages 10 feet in width. Based on review of aerial photographs, approximately 2.6 acres of riparian area, along with 37 feet of stream channel, will be impacted below the dam. This represents a very small percentage of the

habitat in the area in the watershed, and does not significantly affect the total riparian area of the watershed. Even though the impact is not significant, the impact will be further reduced by mitigating the loss with 2.6 acres of woodland planting.

A habitat assessment of the site dated July 31, 2007, has been completed by the NRCS, the U.S. Fish and Wildlife Service (USFWS), and the Kansas Department of Wildlife and Parks (KDWP). According to the habitat assessment, “no SINC (Species In Need of Conservation), Endangered, or Threatened Species were identified during the assessment,” and “no impacts to Threatened and Endangered (T&E), to SINC, or to Critical Habitat was identified on July 18, 2007.” An additional habitat assessment was conducted by the same agencies on April 28, 2010, to address a new auxiliary spillway alignment. No additional impacts to T&E, SINC, or Critical Habitat were identified on this assessment.

During construction there would be work activity in and at the fringes of the permanent pool, downstream stilling basin, and outlet channel. The permanent pool would be released at a controlled rate to draw down the permanent pool to an elevation at which work could be accomplished. Placement of fill to raise the embankment will encroach into the permanent pool and stilling basin. Any disturbed areas would be restored to pre-work conditions.

A wetland determination was conducted by the NRCS in 2007, which revealed approximately 7.8 acres of “artificial” wetlands at Site No. 7. With increased floodwater capacity, wetland areas identified to the north and west of Site No. 7 may become temporarily inundated during storm/flood events. However, once surface waters return to normal pool elevation, these wetland areas should return to normal pre-work conditions.

For the Project, cumulative effects on these issues were evaluated within the Project area. For the purpose of this evaluation, health and human safety is linked to flood control and potential flood hazard. Currently, there are no plans for major state or county roadway expansions within the Switzler Creek Watershed, with the following exception: There are plans to upgrade Highways 31 and 56 through the town of Burlingame with funds allocated through the American Recovery and Reinvestment Act of 2009. However, there are no plans for major upgrades of other roads in the area. Cumulative effects of the Project are analyzed in relation to proposed development near the structure. There are no short-term or long-term plans for development around the site area. Site 7 is located outside of the city limits of Burlingame. There are plans to convert an abandoned railroad property on the east side of Burlingame to a park. This railroad property is located approximately one to two blocks from Switzler Creek on the east side of Burlingame. The conversion of the railroad property may occur in about one or two years. This railroad property is also in the Kansas Department of Health and Environment (KDHE) Brownfields Cleanup Program as a result of historic railroad property use. A Farmers Cooperative Association (FCA) CO-OP facility also identified in the Brownfields Cleanup Program is also located on the east side of Burlingame, approximately one to two blocks from Switzler Creek. The railroad property and FCA CO-OP facility appear to be located within or near the benefit/breach area of Site 7 as identified in the Emergency Action Plan. Future development does not appear to have cumulative effects on the above-listed resources.

To avoid and minimize impacts to nesting migratory birds, needed vegetation clearing is proposed to occur outside of the primary nesting period of April 1 to July 15. Should clearing activities be required during this time period, a survey of the affected habitats may be conducted to determine if nesting migratory birds are present. A survey would be coordinated with USFWS to determine if any migratory birds would be affected.

Alternatives

No significant adverse environmental impacts will result from the rehabilitation of Site No. 7.

The Recommended Action is the most practical means of addressing public health and safety and maintaining flood damage reduction benefits.

Other alternatives considered included No Federal Action–High Hazard, Federal Decommissioning, and a No Federal Action–Hazard Removal.

Consultation—Public Participation

Interested agencies were invited to the Environmental Evaluation to review the Project on June 7, 2007. Comments were requested from interested agencies by July 18, 2007. No written responses were received.

Tribes with potential interest were identified and sent correspondence to seek any input in the Project. Responses were due by July 31, 2007. No written responses were received.

A public meeting was held in September 24, 2007, to review the Project and determine what additional issues are associated with this project.

Switzler Creek Watershed Board meetings were held on June 18, 2009, and July 9, 2009, to review alternatives and their effects on the environment. At the June 18 meeting, alternatives were introduced and the Project was explained to the public. The sponsoring local organizations (SLOs) agreed at the July 9 meeting that the Federal Reconstruction Alternative was the preferred alternative and met the overall purpose and need for the Project.

Agencies were requested to participate in an environmental evaluation during the scoping process (June 7, 2007). Comments were requested by all interested agencies. No comments were received from agencies during the comment period.

The Kansas SHPO was contacted. The Project area was reviewed by the Kansas State Historical Society. No significant archeological sites (i.e., sites potentially eligible for listing on the NRHP) were found in the Project area. In addition, the NRCS has determined that the structure itself is not eligible for listing on the NRHP. Tribal consultation was completed by the NRCS.

A habitat assessment of the site dated July 31, 2007, has been completed by the NRCS, the USFWS, and the KDWP. According to the habitat assessment, “no SINC (Species In Need of Conservation), Endangered, or Threatened Species were identified during the assessment,” and “no impacts to T&E, to SINC, or to Critical Habitat was identified on July 18, 2007.” An additional habitat assessment was conducted by the same agencies on April 28, 2010, to address a new auxiliary spillway alignment. No additional impacts to T&E, SINC, or Critical Habitat were identified on this assessment.

The U.S. Army Corps of Engineers (USACE) was offered the opportunity to provide comment on the Project and to assist in identifying permits needed for the alternatives at an on-site meeting August 28, 2007. The USACE indicated that a nationwide Permit Number 3 would be appropriate for this project. The USACE was offered a second opportunity to provide comment on the Project after the auxiliary spillway alignment was moved to the left abutment. The

USACE responded via email dated April 16, 2010. No jurisdictional area would be affected by the new spillway location.

Agencies were notified of the June 18, 2009, Switzler Creek Watershed Board meeting and asked to provide comments. Comments were received from the State Association of Kansas Watersheds and the Kansas Conservation Commission.

Conclusion

Based on the environmental assessment summarized above, I find that the proposed action is not a major Federal action significantly affecting the quality of the human environment, and I have determined that an environmental impact statement for the Switzler Creek Watershed Plan is not required.

(signed)

July 6, 2010

ERIC B. BANKS
State Conservationist

Date